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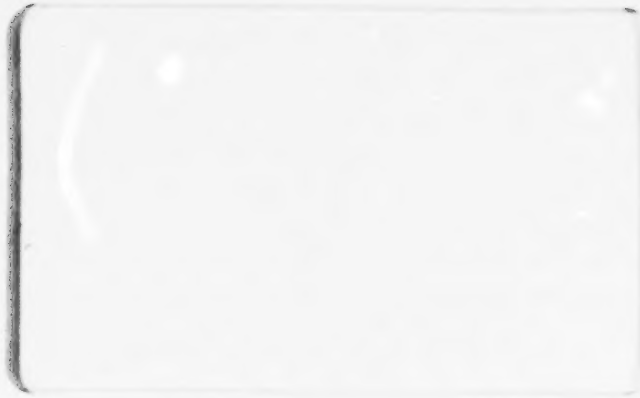

Canada

Yukon
Government

YUKON ECONOMIC DEVELOPMENT
PERSPECTIVE UPDATE
1981-1985

SUMMARY AND RECOMMENDATIONS

YUKON ECONOMIC DEVELOPMENT PERSPECTIVE UPDATE 1981-1985

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YUKON ECONOMIC DEVELOPMENT
PERSPECTIVE UPDATE
SUMMARY REPORT

Introduction

During the early 1980's the Yukon experienced massive economic changes as the territorial economy entered the recession which gripped the entire country. Low mineral prices combined with unrealistic wage settlements and questionable management practices led to the closing of the Yukon's dominant private sector employer, the Cyprus Anvil mine. Following the closure of the remaining two hard rock mines and the White Pass and Yukon Railway by late 1982, the stage was set for a transformation of the Yukon economy. Once dependent chiefly on mining as a regional export and fiscal transfers from the federal government, the Yukon economy became a regional economy driven by federal transfers and supplemented by tourist expenditures. Notwithstanding the sale of the Cyprus Anvil mine to Curragh Resources in late 1985, it remains to be seen whether this transformation is merely temporary or whether it is to become permanent.

Recognition of the economic problems faced by the Yukon led to the renewal of the General Development Agreement, which expired in 1983. Under the terms of the new agreement, entitled the Economic Development Agreement (EDA), an annual review is to be prepared of EDA activities and it is to be accompanied by a review of territorial economic activity.

This document summarizes the Yukon Economic Development Perspective Update and provides a review of the Yukon economy from 1981-85.

The Employment Structure of the Yukon Economy

The Yukon economy, when contrasted to those of the provinces, has been characterized as small, remote from markets, dominated at times by a single industry or even a single firm, and not well-developed in terms of internal linkages. It could be argued that a more meaningful comparison can be made between the Yukon economy and other small, remote, regional economies existing at the sub-provincial level within Canada. Such an undertaking is possible using 1981 Census data for remote Labour Force Economic Regions (sub-provincial groupings of Census Divisions). The data used for comparison is employment by industry and is presented in Table 1.

Comparing the Yukon's employment structure to the 14 Economic Regions in Table 1 reveals some interesting differences. Generally, the Yukon economy is somewhat less reliant on primary sector activities, much less reliant on manufacturing, somewhat more reliant on transportation, communications and utilities and much more reliant on public administration. Labour force representation in other industries is roughly the same for the Economic Regions and the Yukon. As a whole, the Yukon economy is significantly weaker in the industrial or goods-producing sector when compared to the Economic Regions (22.7 per cent of the labour force versus an average of 40.8 per cent) and stronger in the tertiary or service-producing sector (77.3 per cent versus an average of 59.2 per cent).

Of particular interest in comparing the Yukon to selected Economic Regions is employment in manufacturing. Several observations can be made concerning manufacturing in remote Economic Regions. Where a significant amount of primary processing has accompanied primary industry activity, linkages to other local manufacturing industries appear to have developed, further increasing manufacturing employment. Secondly, local manufacturing employment showed a much stronger correlation with primary processing employment than with the size of a region's labour force.

TABLE 1

DISTRIBUTION OF EMPLOYMENT BY INDUSTRY FOR SELECTED ECONOMIC REGIONS, YUKON AND CANADA, 1981

	TOTAL LABOR FORCE (no.)	PRIMARY (%)	MANUF. (%)	CONST. (%)	TRANS.* (%)	TRADE (%)	FINANCE** (%)	SERVICES*** (%)	PUBLIC ADMIN. (%)	TOTAL (%)
ECONOMIC REGIONS										
Marystown, Nfld.	19,445	7.1	39.2	5.4	11.0	13.6	1.0	17.4	5.2	100.0
Corner Brook, Nfld.	51,335	17.3	15.4	7.4	8.4	16.2	2.5	25.3	7.4	100.0
Grand Falls, Nfld.	48,585	15.5	16.9	7.7	9.1	16.2	2.1	25.2	7.4	100.0
Sydney, N.S.	64,580	11.2	15.4	7.0	9.2	16.3	2.9	30.9	7.1	100.0
Sept-Iles, Que.	56,070	19.4	12.7	5.7	11.2	12.5	2.9	28.2	7.4	100.0
Gaspe, Que.	44,500	12.8	19.3	6.7	6.1	14.3	2.5	31.2	7.0	100.0
Val-d'Or, Que.	61,570	16.4	13.3	6.0	8.5	16.1	2.9	30.0	6.8	100.0
Thompson, Man.	48,820	29.1	6.6	4.9	9.3	13.6	2.6	25.0	9.0	100.0
Prince Albert, Sask.	96,000	28.2	5.5	7.8	6.7	15.8	3.0	24.6	8.4	100.0
Edson, Alta.	49,565	25.2	7.2	9.5	8.6	14.0	3.5	25.4	6.5	100.0
Grande Prairie, Alta.	59,325	27.4	6.4	9.7	8.4	15.5	3.3	22.8	6.5	100.0
Fort McMurray, Alta.	76,335	27.9	4.9	10.5	6.6	13.5	3.3	24.0	9.3	100.0
Prince George, B.C.	90,670	12.6	21.3	7.6	8.9	16.2	3.7	24.3	5.5	100.0
Prince Rupert, B.C.	62,505	15.5	17.4	8.1	10.5	14.7	3.0	23.6	7.2	100.0
TOTAL	829,305	19.8	12.9	7.6	8.6	15.0	2.9	25.8	7.3	100.0
AVERAGE	59,236	19.0	14.4	7.4	8.8	14.9	2.8	25.6	7.2	100.0
YUKON	12,855	12.6	2.6	7.5	13.2	13.8	4.1	25.2	20.9	100.0
N.W.T.	18,910	13.5	2.3	5.3	11.3	11.3	3.8	25.7	26.9	100.0
CANADA	11,877,035	7.1	19.2	6.5	8.1	16.9	5.4	29.3	7.6	100.0

SOURCES: 1981 Census of Canada

NOTES: * includes Communications and Utilities
** includes Insurance and Real Estate
*** includes Community, Personal and Business Services

Although these findings should be taken as preliminary, the conclusions stated above suggest that the low percentage of manufacturing employment in the Yukon may not be so much due to a small regional population but, rather, results from very little primary processing taking place in the territory.

Structural differences within the service-producing sector can largely be explained by three characteristics of the Yukon economy not present elsewhere in the sample of Economic Regions (at least not to the same extent). These characteristics are the nature of the Yukon as a distinct political entity (leading to much higher public sector employment), the relatively greater development of tourism in the Yukon and the extensive development of both road and air transportation in the Yukon.

The almost identical proportions of employment in the trade and services industries (where virtually all tourism-related employment is contained) in the Yukon and on average in the Economic Regions considered suggests that the trade and services industries are underdeveloped in the Yukon. The greater importance of tourism to the Yukon indicates that if tourism-related employment is subtracted from trade and services totals, the Yukon economy would appear comparatively deficient in these industries. This deficiency may be the result of a lack of spinoff industrial demand rather than weak consumer spending.

Several general conclusions can be drawn from a comparison of the Yukon economy to the sample of sub-provincial regional economies. The lesser significance in the Yukon economy of goods-producing activities, primary extraction and processing in particular, has resulted in the development of few of the associated linkages and spin-offs within the key manufacturing and trade and services industries. Instead, the unique political nature of the Yukon and the presence of a greater level of tourism activity, although accounting for the relative strengths of the territorial economy, have not served

jointly to stimulate local manufacturing and trade and service activity to the same extent primary extraction and processing activities have done in the other regional economies examined.

MAJOR INDICATORS

After dipping by 11 per cent in 1983 in response to the economic changes of 1981-82, the Yukon population rebounded to a figure of 25,281 in December 1985, approximately four per cent below its December 1981 level. Population statistics and other major statistical indicators are presented in Table 2.

The spatial distribution of the population residing outside of Whitehorse showed signs of change over the 1981 to 1985 period. Growth in community populations generally favoured those communities associated with tourism (Dawson City and Haines Junction, for example) and those communities for which the traditional Indian economy is important (Burwash Landing, Old Crow, Pelly Crossing and Ross River). Growth in these communities, however, served only partially to offset the major population declines in communities dependent on hard rock mining (Elsa and Faro). Changes in the population of Whitehorse over the 1981-85 period tracked the territorial figures closely, reflecting the fact that two-thirds of the territorial population is located in the capital.

Offsetting net out-migration of 2,872 persons during 1982-85 was the natural increase in the population, stable at about 400 persons per year over the 1981-85 period and totalling 1,583 for 1982-85. When both migration and natural increase are considered, it is clear that the largest factor in population change after 1981 was a reduction in annual in-migration.

The labour force in the Yukon is younger and more highly educated in

TABLE 2

POPULATION, LABOR FORCE AND PRICE LEVEL STATISTICS, YUKON, 1981-85

	1981	1982	1983	1984	1985
POPULATION					
Total Population	25,868	24,584	23,498	n.a.	25,070*
Population 15+ Years	17,439	16,938	16,236	n.a.	18,668*
LABOR FORCE AND EMPLOYMENT					
Total Labor Force	13,222	12,817	11,746	12,532	12,413
Employed Labor Force	11,763	11,118	10,087	10,913	10,554
Full-time Employment	10,574	9,877	8,906	9,686	9,527
Unemployed Labor Force	1,459	1,699	1,658	1,619	1,859
UNEMPLOYMENT RATE (%)					
Yukon	11.0	13.3	14.1	13.0	15.0
Canada	7.6	13.5	11.9	11.3	10.5
CONSUMER PRICE INDICES (March 1982=100)**					
Whitehorse					
all items	n.a.	103.2	108.4	112.7	117.1
food	n.a.	107.8	109.8	113.9	117.1
housing	n.a.	101.9	104.8	108.9	114.3
clothing	n.a.	101.1	105.6	108.2	109.1
transportation	n.a.	102.6	110.1	114.5	120.5
SPATIAL PRICE INDICES**					
Whitehorse (Vancouver=100)					
all items	116.1	115.7	116.8	113.1	113.7
food	117.6	120.1	121.4	119.3	124.5
Whitehorse (Edmonton=100)					
all items	121.6	120.7	122.4	124.6	121.6
food	121.9	127.7	128.3	131.3	129.6

SOURCES: Bureau of Statistics, YTG; Statistics Canada

NOTES: * average for June to December only
** price indices are shown for June of the respective year

comparison to national averages, which helps explain its high mobility. Changes in the Yukon labour force and in employment over the 1981 to 1985 period closely followed those for population, although the variables showed a slight decline in 1985. This was a disturbing trend when viewed alongside the noticeable jump in out-migration and unemployed labour force in that year. Most evident in the employment figures was the loss of over 1,600 jobs (measured either by employed labour force or full-time employment) over the 1981 to 1983 period. However, this was followed by a strong recovery in 1984 involving the creation of 700 to 800 jobs.

In summarizing changes in employment over the entire 1981 to 1985 period, there was a loss of approximately 1,300 jobs from the goods-producing industries, primarily from mining and construction, and a net loss of approximately 850 jobs from the service-producing industries, with losses in wholesale trade, finance and community, business and personal services. There was some growth in the accommodation industry and roughly constant employment in transportation, communications and utilities, retail trade and government. In comparison to 1981, the Yukon economy in 1985 was significantly more reliant on service-producing activities for employment and even more so with regard to wages and salaries.

Unemployed labour force figures in the three years after 1981 were surprisingly stable considering the large number of jobs lost between 1981 and 1983. The increase of about 250 in unemployment in 1985 over 1984, the largest jump in the decade, again reflects the general weakening in the aggregate indicators for that year. Recently released estimates for the unemployment rate clearly indicate that the Yukon in 1985 was relatively worse-off either when compared to figures for the down-turn period (1981-83) in the territory or when compared to unemployment figures for all of Canada. Indeed, not only was the unemployment rate for the Yukon in 1982 - the year for which unemployment would have been expected to be at its worst - below the national figure but the two per cent increase in the Yukon rate in

1982 over 1981 paled in comparison to the near doubling of the rate nationally over the same period.

Average incomes have traditionally been high in the Yukon, partially because a financial inducement to attract workers to the Yukon has been needed but also to offset higher costs of living. Statistics Canada figures show real annual earnings in the private sector dropped from $26,519 per worker in 1981 to $23,196 in 1983, rising to $25,036 in 1985. Earnings in the government sector continually rose over the period from $19,349 per worker in 1981 to $29,694 in 1985. This reversal in relative magnitude for private and public sector earnings reflects a loss of high-paying mining jobs in the Yukon and steady increments in government incomes, many of which were the result of labour negotiations elsewhere. This realignment of Yukon private sector and government earnings brought them in line with earnings in these two sectors on a national basis, although the national figures for both are 10 to 15 per cent lower.

Examination of income distribution within Yukon communities reveals some marked differences among communities. Most communities, with the notable exceptions of Faro and Whitehorse, show a skewedness towards lower income ranges. This is especially true of the many smaller communities in the Yukon.

A discussion of income cannot be left without mention of the role of subsistence income or income-in-kind. This is an especially important consideration when making judgements about income levels in various communities. Many persons in those communities showing marked skewedness towards lower income ranges earn supplementary income through non-market activities which are not recorded. Although not measured, this income contributes to a person's standard of living and should not be ignored.

The total value of subsistence is estimated at close to $10 million. This value is more than 50 per cent greater than the value of

commercial output from the primary renewable resource sector. However, taken as a percentage of total personal income received in 1985 estimated at about $350 million, the subsistence harvest represents only about 3 per cent. Thus, the subsistence harvest is a visible but relatively small proportion of all personal income earned in the Yukon.

Price levels and price level changes, in addition to income levels, are important in determining purchasing power. Generally, price inflation in Whitehorse from 1982 to 1985 was higher than that for other western Canadian cities, such as Edmonton and Vancouver, and about equal to the rate for Canada. The rate for Whitehorse averaged 4.3 per cent from 1982 to 1985, with the major contributors to inflation being food and transportation.

Prices for all items in Whitehorse averaged 15.1 per cent higher than in Vancouver and 22.2 per cent higher than in Edmonton over the 1981-85 period. Taking food alone, the price differences were even higher, measuring 20.6 per cent and 27.8 per cent above levels in Vancouver and Edmonton, respectively.

Spatial price index statistics for the Yukon in 1985 indicate a wide range of discrepancies in price levels among the Yukon's smaller communities and with Whitehorse. Price levels in communities such as Burwash, Destruction Bay, Ross River and Carmacks exceeded Whitehorse prices by 20 to 30 per cent while in Old Crow the price difference exceeded 50 per cent.

The impact of these price level differences within the Yukon becomes more pronounced when considered in association with income differences. Since the distribution of income in smaller Yukon communities (excluding Faro) generally favours lower income ranges, real purchasing power in these communities is even lower compared to Whitehorse than price indices alone would indicate.

Mining

The Yukon's mining industry is composed of three sub-industries: hard rock mining, placer mining and mineral exploration. Sand and gravel production, amounting to a half million tonnes annually, took place during most of the 1981-85 period. A small amount of coal was also mined to supply the needs of the Cyprus Anvil mine's mill but production ceased with the shut-down of the lead-zinc mine. Barite production destined for use as drilling mud in the Beaufort, though taking place at a mine operating just inside B.C., provided economic benefits to the Watson Lake area after 1982.

Developments in metal prices (lead in particular), resulting from slackening demand and new supplies, led to a sudden and dramatic reduction in hard rock mining activity in the Yukon in 1982. The value of all Yukon mineral production (the net-back received by the hard rock mine operator is approximately 40 to 50 per cent of this value once smelting and transportation charges are deducted) dropped from $236 million in 1981 to $169 million in 1982 and dropped a further $107 million in 1983 to $62 million. The figure subsequently rose in 1984 to $65 million but again fell in 1985 to $57 million, its lowest value in many years. Detailed mineral production values are given in Table 3.

Lead, zinc and silver production was virtually shut-down in 1982. For lead and zinc, produced at that time at two mines, Cyprus Anvil and United Keno Hill, the declining trend in production actually began earlier; however, annual production in 1982 represented a dramatic decrease due to mine closures at mid-year. The only major lead-zinc related activity after 1982 was a $50 million government-support stripping program at Cyprus Anvil in 1984 and 1985.

Silver was the only mineral produced at United Keno Hill when operations there were resumed in mid-1983. Whitehorse Copper, accounting for all copper production in the territory as well as some

TABLE 3

MINING, TOURISM AND GOVERNMENT ECONOMIC STATISTICS
YUKON, 1981-85

	1981	1982	1983	1984	1985
			($ thousands)		
VALUE OF MINERAL PRODUCTION	235,575	168,570	61,541	65,038	56,691
Gold	33,941	39,721	50,337	44,419	43,098
Silver	32,339	29,943	6,891	18,825	12,675
Lead	54,935	25,733	307	1,539	877
Zinc	94,237	58,519	31	244	41
Copper and Other Minerals	20,123	14,654	3,983	11	-
MINERAL EXPLORATION EXPENDITURES	50,000	22,000	12,000	22,000	25,000
ACCOMODATION AND FOOD SERVICES RECEIPTS	47,961	42,830	37,835	42,938	n.a.
Accomodation	26,961	33,130	30,235	33,188	n.a.
Food Services	21,000	9,700	7,600	9,750	10,000
BORDER CROSSINGS (no. of travellers)	386,772	365,057	394,154	422,094	469,509
GOVERNMENT EXPENDITURES*	258,200	293,900	325,964	357,742	372,707
Federal Government	113,600	128,000	146,500	160,400	156,590
Yukon Government	139,039	161,538	173,859	190,220	208,699
operating	109,940	131,557	138,953	147,243	155,960
capital	29,099	29,981	34,906	42,977	52,739
Municipal Governments**	18,252	17,972	21,235	23,087	24,628
YUKON GOVERNMENT REVENUES	163,700	184,736	199,586	238,377	263,419
Own Source Revenues	68,525	65,567	74,736	71,275	76,359
Federal Transfers	95,175	119,169	124,850	167,102	187,060
operating and capital grant	76,105	103,264	107,708	148,591	158,768
other transfers	19,070	15,905	17,142	18,511	28,292

SOURCES: Bureau of Statistics, Government of Yukon; Northern Affairs Program, DIAND; Statistics Canada; Department of Finance, Government of Yukon; Annual Northern Expenditure Plan, DIAND

NOTES: * Total does not equal column totals due to double counting of some expenditure items; expressed on a fiscal year basis (1981=1981/82)
** Adjusted from calendar to fiscal year basis using a 75/25 split.

gold and silver, ceased production at the end of 1982 due to the exhaustion of viable reserves.

Most of the gold produced in the Yukon has been from placer operations concentrated in the Dawson City area. These operations generally involve the reworking of claims originally mined at the time of the 1898 gold rush. The total number of placer operations averaged 213 annually between 1981 and 1985. Placer mining during this period provided seasonal employment for over 700, although many may not have been year-round residents of the Yukon.

In 1981 the proportion of all gold produced from placer mines was 86 per cent and from 1982 to 1985 all gold produced was from placer mines. Total production of gold showed a strong upward trend over 1981-83, increasing by 50 per cent during this period. This increased production followed a staking rush during the years 1979 to 1981. The rush resulted from the extremely high gold price levels that prevailed after the Iranian oil crisis of 1979. Prices only began to subside after 1980 at which time the average price on the London metals market was $713/oz. (Canadian). Since 1980 the price has fluctuated between $450/oz. and $550/oz.

Mineral exploration activity depends crucially on expected returns and as a result the declining prices of the early 1980's had a dampening effect on activity. Estimated exploration expenditures in 1981 were $50 million for the Yukon, concentrated primarily in the Dawson Range, the Mayo region, MacMillan Pass and Southeast Yukon. Efforts concentrated on promising showings of zinc-lead-silver, tungsten, molybdenum and gold. After 1981, activity declined by 50 per cent in 1982 and a further 50 per cent in 1983. Expenditures subsequently rose in 1984 to $22 million and again in 1985 to $25 million.

The strengthening in exploration expenditures after 1983 reflected interest in precious metals and, in particular, the further development of small high grade deposits discovered several years

earlier. Typically, these activities attracted additional prospecting and staking in adjacent areas. The availability of flow-through share financing, which allows investors in exploration projects a tax deduction of $1.33 for every $1 invested, was also a major factor in the strengthening of expenditures after 1983.

Tourism

The importance of tourism in the performance of the Yukon economy during 1981-85 was substantial and is thought to have increased in recent years. Resident and non-resident border crossings are the only available measure of tourism visitation. After a modest decline of about 5 per cent in 1982, resident and non-resident border crossings increased consistently, from an estimated 365,057 in 1983 to 469,509 in 1985.

Modes of entry by year showed a definite trend towards the use of personal vehicles (59 per cent of crossings in 1981 in comparison to 71 per cent in 1985). The modes showing a declining share of the total were air and rail, together accounting for 23 per cent of the total in 1981 but only 13 per cent by 1985.

No reliable statistics on non-resident expenditures during 1981-85 are available. It is impossible, therefore, to isolate the shares of retail trade receipts originating from residents versus non-residents. Nonetheless, despite the short-lived length of visits by non-residents and the predominance of low-spinoff, camping-based travel, retail receipts in the Yukon would be substantially lower in the absence of tourism.

Although there are no reliable tourist expenditure data, statistics on the structure and performance of the accommodation and food services industry are available. The number of accommodation and food service

establishments in the Yukon has risen in recent years, from 103 in 1983 to 126 in 1985. If establishments run by owner-operators are included the 1985 total would be close to 170.

In the accommodation group, including hotels, motels, lodging houses and campgrounds, the Yukon shows very high proportional representation. Together these accommodation businesses accounted for 18.2 per cent of all service industry establishments in December 1985, while nationally the share was 4.2 per cent. Clearly, the tourism-linkage here is especially visible. Restaurants and other food service businesses showed a lower percentage of all service businesses, 10.4 per cent in comparison to 14.4. per cent on a national level.

About 50 per cent of hotels, lodges and motels in the Yukon have greater than 20 units, with approximately 2,000 units available in 1985. Comparing employee size ranges, the Yukon's accommodation and food industry is much more concentrated in the 10 to 49 employee range than is the case nationally. This emphasizes the importance of large hotel and motel establishments in the Yukon's industry. Despite this importance, statistics show that in recent years non-residents have been shifting towards increased use of campgrounds rather than hotels. In 1984, 34 per cent of visitors signing in at visitor reception centers stayed in hotels, while the figure for campgrounds was 51 per cent. In 1985, the hotel figure had fallen to 27 per cent while campground usage had risen to 56 per cent of all sign-ins.

As portrayed in Table 3, total receipts in the accommodation and food services industry declined between 1981 and 1983, primarily as a result of declining restaurant receipts. Figures for 1984 showed a modest recovery in both accommodation and restaurant receipts. These figures, except for 1983, parallel border crossing data reasonably well; however, the consistent shift towards private vehicles and campground usage which took place during the period indicates that receipts data are only a partial indicator of overall non-resident visitation.

Employment in accommodation and food services in 1981 stood at 1,085. Of this total, 720 were employed in accommodation establishments (including hotel and motel restaurants). Subsequently, accommodation employment rose significantly, by 80 in 1982 and 60 in 1983. Figures for 1984 show a levelling off at about 860 employees. No reliable figures on food services employment are available after 1981.

Government

The proportion of economic activity in the Yukon accounted for by the public sector far exceeds provincial averages. In fact, government current expenditures on goods and services (non capital items) in 1984 were 82 per cent of the value of personal expenditures on goods and services in the Yukon; thus, government purchasing and payroll expenditures nearly equal the day-to-day transactions of individuals. Nationally, government current expenditures were only 36.7 per cent of personal expenditures in 1984.

Employment and payroll figures provide additional evidence of the significance of government to the economy. In 1985, public sector employment in the Yukon averaged 3,677 or 38.6 per cent of the full-time workforce. This figure had risen from 35.5 per cent of full-time employment in 1981 as a result of a decline in the total full-time employment figure; public sector employment actually remained relatively constant during 1981-85.

Government expenditures have not only been important because of the size of their contribution but also because of their stable nature. This stability exists because government expenditure decisions have historically been made largely in isolation from economic circumstances in the Yukon. Therefore, government expenditures have been less likely to expand during boom times or contract during recessions in comparison to private sector expenditures. This effect

would tend to moderate the boom-bust phenomenon.

Total federal and territorial expenditures have been rising in recent years. The average annual increase in government expenditures between 1981-82 and 1985-86 was 9.6 per cent, well ahead of inflation. Discounting for inflation, the real average increase was 4.7 per cent per year. On a per capita basis the average increase would have been even higher due to the reduction in the Yukon's population experienced during this period. Government revenue and expenditure data is provided in Table 3.

The federal and territorial shares of total government expenditures remained relatively constant throughout the 1981-85 period. Territorial expenditures varied from 50 to 56 per cent of the total. Municipal government expenditures have generally represented from 6 to 7 per cent of total government expenditures.

A major component in territorial government revenues has been fiscal transfers from the federal government. Transfers are necessary because of the small tax base in the Yukon from which government can draw revenue. The operating and capital grants historically represented the major portion of the federal transfers, averaging 68 per cent of the total from 1981-85. These grants were intended to cover on-going expenditures included in the operating and capital budgets. The Established Programs Financing transfer covered such specific program items as extended health care, hospital and medical care and post-secondary education. The proportion of all territorial revenues made up by federal transfers jumped from 50 per cent in 1981-82 to 70 per cent in 1985-86.

Territorial finances have changed somewhat since fiscal year 1984-85 with the introduction of a formula financing agreement between the federal and territorial governments. Under the terms of this three year funding arrangement, additional funds will become available to the territorial government. These funds have thus far been applied to

such uses as needed upgrading of community infrastructure and roads. The financing agreement was also intended to provide certainty as to the amount of the federal transfer, enabling more precise budgeting.

Renewable Resource Industries

The agriculture industry in the Yukon is still in an early stage of development, despite many years of activity on a small scale. Best estimates indicate there are approximately 25 full-time operations at present accompanied by roughly 75 part-time operations (farmers making less than 50 per cent of their income from farming). A 1980 Government of Yukon study estimated there was a total of 47 operations in the Yukon in 1979 (assumed here to include full-time and part-time) which suggests that the farm industry has been expanding.

Agricultural production data is sparse. There is no data available prior to 1984 and the values of production for 1984 and 1985 should be accepted as approximations only. The figure for 1984 is $1.32 million, composed of $238,000 from grain production, $600,000 from forage (chiefly brome), $102,400 from potatoes and $380,000 in livestock and egg sales. The 1985 value was boosted to $1.68 million to account for increased forage production.

The major long-term economic barrier facing the agriculture industry has been high costs, a problem compounded by the small scale of operations. Although farmers face high costs, they can expect relatively high prices for their production. For example, in June, 1985 food for home consumption purchased in Whitehorse was 22 per cent more expensive than similar purchases in Edmonton and 24.3 per cent more expensive than in Vancouver. If only fresh produce is considered the price discrepancy is close to 50 per cent.

Aside from economic factors, there are a number of other issues which

have affected the size of the industry to date. A major factor here is the unavailability of land due to the land claims process and the consequent slowing of federal-territorial land transfers. Financing practices, a lack of inspection facilities and product standards, and taxation procedures have also hampered agricultural development in recent times.

Primary forest industry production in the Yukon has traditionally been destined for various other value-adding activities (lumber production, commercial log building construction and seed processing) or sold directly to consumers as a final product (fuelwood and some roundlogs for building construction). The total volume of wood fiber produced increased considerably during the 1981-85 period.

Most of the increase was accounted for by increased production of fuelwood and by a sudden increase in sawlog production in 1985 caused by the short-term opening of Watson Lake Forest Products, the largest sawmill located in the Yukon. The 1985 sawlog production figure, at 64,188 cubic meters or nearly 5 times average production from 1981-84, demonstrates the important role the Watson Lake Forest Products mill is capable of playing in the Yukon forest industry. Production during the 1981-84 period at this sawmill was intermittent at best.

The generally increasing trend in commercial fuelwood production over 1981-85 reflected not only an increase in demand induced by switch-overs to wood-based space-heating but also the fact that commercial operators have been increasingly able to gain market share in competition with the personal gathering of fuelwood supplies.

DIAND permit data indicates that in 1981 about 42 per cent of permitted fuelwood came from commercial suppliers but by 1985 this proportion had grown to 68 per cent.

During 1981-85, the supply of cones to B.C. seed processors continued to be a means of earning supplemental income for 15 to 25 persons in

the Yukon. However, cone picking is highly seasonal with activity taking place for only two months of the year. Except for 1985, production increased consistently over the period, most of it destined ultimately for Britain, France, Germany and Scandinavia.

The estimated annual value of all primary forest production is shown in Table 4 (along with production values for other primary and processing activities). Throughout the period, fuelwood production represented from one-third to one-half of the value of all primary forest production. The value of lumber produced, shown separately as a processing activity, averaged $470,000 from 1981-84, but jumped to $2.5 million in 1985 with the temporary opening of the Watson Lake Forest Products mill.

Commercial fishing effort is focused on salmon (chinook and chum) taken from the Yukon River and lake trout and whitefish taken principally from Central Yukon lakes. The salmon fishery dominates the industry, accounting for up to 95 per cent of the total commercial catch by weight. Approximately 45 licenses were held by salmon fishermen over the period, although about 27 of these licenses accounted for virtually all of the harvest. Salmon are marketed either directly to consumers or to processors in Dawson City.

For chinook salmon, the proportion of the catch sold to processing operations rose from about two per cent in 1981, before the Han Fishery processing plant opened, to 70 per cent in 1985. For lower-valued chum the rise in sales to processors was less spectacular since substantial processing sales were already being made in 1981. However, by 1985 total sales of chum to processors amounted to over 90 per cent of the catch. The value of the chinook catch has averaged 2.5 to 6 times the value of the chum catch, while the total value of the salmon catch during 1981-85 ranged from $236,000 in 1982 to $350,000 in 1981.

The size of the Canadian Yukon River salmon catch is significantly

TABLE 4

RENEWABLE RESOURCE AND SUPPORT SECTOR ECONOMIC STATISTICS
YUKON, 1981-85

	1981	1982	1983	1984	1985
			($ thousands)		
VALUE OF AGRICULTURAL PRODUCTION	n.a.	n.a.	n.a.	1,320	1,680
VALUE OF PRIMARY FORESTRY	746	1,164	1,159	1,326	2,192
Sawlogs	177	158	183	175	923
Roundlogs	227	178	205	240	141
Fuelwood	241	647	582	689	938
Cone Production	101	180	189	221	191
VALUE OF COMMERCIAL FISHING	366	261	313	252	275
Chinook Salmon	258	194	248	200	199
Chum Salmon	92	42	55	37	49
Freshwater Fishery	17	24	10	15	27
VALUE OF FUR PRODUCTION	1,298	1,577	1,179	737	1,280
Lynx	817	1,202	709	388	644
Marten	229	190	217	184	449
Other Species	252	185	253	165	187
VALUE OF RENEWABLE RESOURCE PROCESSING	478	595	707	577	2,877
Fish Products	-	169	212	105	383
Lumber	478	426	495	472	2,494
VALUE OF CONSTRUCTION	184,700	189,600	163,300	159,800	152,100
New	164,100	143,800	114,400	103,500	89,400
Repair	20,600	45,800	48,900	56,300	62,700
ELECTRIC POWER GENERATED (MW-hr)	393,457	345,819	242,828	255,449	256,509
RETAIL TRADE RECEIPTS	111,804	101,374	104,612	117,975	132,594
Food Stores	26,189	31,146	38,536	43,445	47,013
Vehicles and Automotive	29,825	20,472	17,672	21,548	26,285
All Other Merchandise	55,790	49,756	48,404	52,982	59,296
VALUE OF REAL ESTATE TRANSACTIONS	67,820	42,646	50,889	45,377	61,220

SOURCES: Bureau of Statistics, Government of Yukon; Statistics Canada; Han Fisheries Ltd.; Department of Renewable Resources, Government of Yukon; Forest Resources, Northern Affairs Program, DIAND and internal estimates; Department of Fisheries and Oceans;

constrained by fishing effort on the American portion of the river. Although estimates indicate approximately 40 per cent of the Yukon River salmon population originates from spawning areas in the Yukon, the Canadian commercial salmon catch on the river was less than 9 per cent of the Alaskan share of the catch in 1983. Treaty negotiations are now underway to resolve this and other fishery issues, although the Americans have indicated they are not willing to reduce their share of the catch. Instead, increased escapement to the Yukon may have to come from reductions in the Japanese harvest of salmon in the Bering Sea.

The freshwater fish catch is of limited importance and is primarily taken in March and April to eliminate costs for boats and refrigeration. There are 20 lakes on which commerical fishing is permitted and the catch on each is restricted by quotas. In some cases, only small percentages of the quota limits are actually harvested while in others there has been evidence of overfishing.

Trapping is primarily carried out by Indians in support of and in association with other traditional activities such as hunting and fishing. However, increasing numbers of non-natives have become involved and in recent years have accounted for a greater share of the value of pelts taken than Indians. This may be changing at present as Indian trappers switch from traditionally trapped species to those offering higher financial returns.

Indians, by agreement, are allotted 70 per cent of the total trapping area, with individual trap-lines varying from 65 to 260 square kilometres. The number of licenses issued to trappers and consequently the total level of trapping activity has increased significantly in the last 20 years. Over 700 trappers earned incomes totalling in excess of $1 million annually from 1981-85.

Although trappers face resource constraints based on animal life

cycles, other constraints exist in the form of tariffs and export regulations (trapping is one Yukon industry which could benefit from free trade) and the activities of the anti-trapping lobby. Although much has been made of the potential impact of the anti-trapping lobby on fur sales, it is difficult to determine whether any impact has yet been experienced by Yukon trappers.

The value of fur production ranged widely during 1981-85, but averaged $1.2 million annually. The most important species taken are lynx and marten, together accounting for about 75 to 85 per cent of the total fur value taken during the period. The importance of lynx is the result of high prices rather than large quantities trapped, while a combination of relatively high prices and relatively large quantities trapped account for the significance of marten. Prices in 1985 were near $700 per pelt for lynx and about $65 per pelt for marten, both having more than doubled from levels in 1981.

Support Industries

Those industries making up the support sector include construction, transportation and utilities, trade, finance and services. Characterizing these industries is a focus on local sales and, therefore, a dependence on activity levels in the key export and government sectors. Selected support sector data is presented in Table 4.

The construction industry has played a significant role in the Yukon economy, both prior to the mine closures of 1982 and subsequently. In general, the value of construction output represents a higher proportion of overall economic activity in the Yukon than in other jurisdictions in Canada. On a per capita basis, construction expenditures in the Yukon in 1981 were more than three times the national average.

New construction expenditures declined continuously throughout 1981-85, reaching by 1985 a value only 55 per cent of the 1981 figures (see Table 4). The decline in new construction, however, was offset by a tripling of repair construction expenditures over the same four year period. All told, the total value of construction dropped less than 20 per cent from 1981 to 1985.

Perhaps the most noticeable feature of construction activity in the Yukon is the high proportion accounted for by government. In 1984 this proportion was over double the 20 per cent share found at the national level. This phenomenon, though not surprising, is the major factor behind the only modest decline in construction activity after 1981 in comparison to the more dramatic drop in mining activity.

Government-sponsored construction rose consistently during the 1981-83 period, both in proportional and absolute terms. However, speculation that massive increases in government-sponsored construction propped up the economy is not borne out in light of the relatively small increments that actually took place; in fact, estimates show that government construction expenditures actually fell marginally in 1984 from the previous year's value.

Government expenditures on construction were directed primarily towards buildings and roads. A new airport terminal and a territorial court house together worth nearly $17 million were begun in 1984 and 1985. Expenditures on roads by the federal and territorial governments amounted to $22 million in 1984 but dropped to $20 million in 1985.

In contrast to rising government construction expenditures, private sector construction showed significant reductions in 1982 and 1983. The decline in non-residential construction, amounting to roughly $35 million over the two years, was in large part due to a drop in mining exploration and development expenditures.

The transportation industry in the Yukon consists of both freight-hauling and passenger components. Prior to October, 1982, the White Pass and Yukon Railway moved ore and general freight out of the territory and general freight, including mining input materials, and motor gasoline, into the territory. Due to a drastic reduction in mining-related transport demand rail service was suspended in late 1982. With the trucking industry experiencing a down-turn in 1982, closure of the railway produced a needed boost in demand for trucking services, since any general freight previously moved by rail on a regular basis had to be switched to trucks.

While truckers hauling freight into and out of the Yukon were able to pick up on new demand, trucking activity within the Yukon was hard hit by the mine closures. In 1981, 554,000 tonnes were hauled by for-hire truckers within the Yukon, most of this being ore transported from the mine site to the railhead. In 1983 and 1984 total tonnage hauled by for-hire truckers within the Yukon dropped to about 45,000 tonnes, a decline of over 90 per cent.

Air and bus travel are the primary means for commercial travel into and out of the Yukon. The share of all border crossings represented by commercial transportation means fell over 1981-85 from 36 to 27 per cent. However, total border crossings into the Yukon increased significantly between 1981 and 1985, except for a minor dip in 1982.

Power is generated and distributed in the Yukon by two companies, NCPC (Northern Canada Power Commission), between 1981 and 1985 a federal crown corporation, and Yukon Electrical Company, a private utility. Power generation declined by 40 per cent between 1981 and 1983 in response to reduced demand from hard rock mines. After 1983, generation remained constant at just over 250,000 MW-hr per year.

Major developments in the electric utility industry during the 1981-85 period were the completion in December, 1983 of the $60 million fourth

wheel at the Whitehorse Rapids generation plant and extensions made to the NCPC power grid to communities in the vicinity of Whitehorse.

The trade industry is made up of both wholesale and retail trade. Wholesale trade is closely linked to industrial and government activity, while retail trade primarily serves households and non-residents.

Receipt data, although not available for wholesale trade, provide a good picture of performance in the retail trade industry. Movements in retail receipts closely followed population levels between 1981 and 1985. The value of retail trade dropped from $111.8 million in 1981 to $101.4 million in 1982, but subsequently rose consistently to reach $130.8 million in 1985.

Breaking down 1985 retail expenditures, the largest component in the Yukon figure for 1985 was food, accounting for 35 per cent of retail receipts (expenditures in food stores including non-food items). This was much higher than the 23 per cent share found nationally. Spending on general merchandise and apparel represented 22 per cent of all Yukon retail expenditures, compared to 19 per cent nationally.

Expenditures on new vehicles and for automotive-related goods and services were much lower in the Yukon at 21 per cent when contrasted with the national share of 32 per cent. Yukon receipts for hardware, home furnishings and other retail outlets represented 22 per cent of the total, while nationally the proportion was 26 per cent. All of the increase in retail trade receipts over 1981-85 was accounted for by food store expenditures; other areas remained roughly constant over the period.

Little data is available to review the performance of the finance industry between 1981 and 1985. However, recently available Yukon financial data for the chartered banks show that for the last three

quarters of 1985, consumer indebtedness to these institutions averaged $38.5 million per quarter. Adding indebtedness to financial corporations, the average quarterly figure rises to $40.9 million. Average quarterly liabilities to individuals (or chartered bank deposits) were $111.4 million for the same period in 1985. No figures are available on business financial transactions and indebtedness in the Yukon.

Financial services, particularly access to credit, have been a source of controversy in recent years. Bank of Canada data indicate that on a per capita basis, business loans from chartered banks to northern businesses are below the national average. In 1985, per capita business loans in the North were only 65 per cent of the national figure. If other sources of finance (credit unions, trust companies, for example) available to southern but not to northern businesses were included, the gap would widen further. Coupled with the low lending amounts is an indication that loan default rates are lower in the North than elsewhere. Together these points suggest that only relatively low risk loan applicants are receiving approval for loans. Therefore, banks may not be extending their loan portfolios in the North into the same higher risk, marginal loans that they are in the South.

Statistics on real estate transactions in the Yukon are collected on an ongoing basis by the Yukon government. The value of all real estate transactions taking place in the Yukon between 1981 and 1985 shows an uneven trend, falling from $67.8 million in 1981 to $42.6 million in 1982, rising in 1983, falling again in 1984 and rising again in 1985 to end the period at $61.2 million. Much of the increase in 1985 is explained by the sale of company housing in Faro totalling $8.7 million. Throughout the period, Whitehorse transactions accounted for between 70 and 80 per cent of the annual total.

Whitehorse figures are available in greater detail than territorial totals. The number of real estate transactions taking place in the capital city averaged near 600 annually during 1981-85, with the trend following the territorial values closely. On average, about 300 single houses changed hands yearly, accounting for about half of the total value of Whitehorse transactions. Commercial and industrial property sales made up approximately 25 per cent of total sales values, remaining relatively constant after a 35 per cent drop in 1982. The remaining share of transactions was composed of sales of multiple dwellings, trailers and lots. The average sales price for houses in Whitehore stood at $72,600 in 1981 but fell in the subsequent two years. In 1984 and 1985 the average sale value remained close to the 1983 figure of $68,800.

The service industries in the Yukon include a wide range of education, health, business and consumer services. Also included in the service industries are many of the establishments which cater to non-residents who make use of accommodation facilities and restaurants. The service industry in the Yukon can be characterized as primarily locally-owned and consisting of relatively more medium-sized businesses than elsewhere in Canada.

Performance of the service industry over 1981-85 can be ascertained from wage data and annual business counts. Preliminary wage and salary data show that in 1981 the community, business and personal services industry division accounted for 18.8 per cent of total earnings. Service industry wage payments remained relatively stable between 1981 and 1983, measured in current dollars, but jumped by 5.9 per cent in 1984, only to drop slightly in 1985. The 1981 Census provides the only recent measure of service industry employment inclusive of teachers, health workers and other employees whose wages are paid by government. In 1981, this measure of employment totalled 3,170.

Business register counts indicate that the number of service

businesses grew throughout the period in question. Between 1983 and 1985, for example, the count of service establishments with employees rose from 365 to 441. To these figures should be added about 300 owner-operated service establishments in order to arrive at an approximate total.

Indian Economic Activity

There is a wide discrepancy between non-native and Indian participation in the Yukon economy. This holds true not only in the formal wage economy, where Indian people are generally under-represented, but also in the subsistence or non-market harvest economy, which is of much greater significance to Indians. Unfortunately, data detailing these differences is sparse and more or less confined to census statistics and several studies of Indian village economies. Although this data is thought to be representative, it should be interpreted with some caution.

Regarding the wage economy, differences are first evident in the nature of the Indian and non-native components of the labour force. Census data show that only 46 per cent of the Indian population fell between the working ages of 20 and 64 years in 1981, compared to a non-native proportion of 64.3 per cent. In addition, the participation rate (those of working age either working or seeking work) among Yukon Indians in 1981 was only 56.6 per cent compared to a non-native rate of 79.9 per cent.

Yukon Indians showed an age breakdown very similar (see Table 5) to natives on the national level. Non-natives, in contrast, exhibited a much greater concentration in the key working age brackets from 25 to 44 years. This provides evidence of the much greater mobility of the non-native workforce.

TABLE 5

AGE DISTRIBUTION AND EDUCATIONAL ATTAINMENT, NON-NATIVE AND NATIVE PEOPLE, YUKON AND CANADA, 1981

	NON-NATIVES		NATIVE PEOPLE	
	YUKON	CANADA	YUKON	CANADA
	(%)		(%)	
AGE DISTRIBUTION				
0 TO 14 Years	24.5	22.4	35.4	38.5
15 to 19 Years	8.5	9.5	14.1	12.5
20 to 24 Years	10.4	9.7	10.0	10.2
25 to 44 Years	40.0	29.8	25.5	25.5
45 to 64 Years	13.9	19.4	10.5	9.9
65+ Years	2.7	9.2	4.5	3.5
TOTAL	100.0	100.0	100.0	100.0
EDUCATIONAL ATTAINMENT*				
Less than Grade 9	7.7	19.8	35.2	37.5
Secondary School				
Without Graduation	26.2	27.8	34.2	33.8
With Graduation	12.6	13.1	5.2	6.1
Post-Secondary, Non-university	30.1	23.2	21.5	16.2
University				
Without Degree	12.8	6.2	3.1	3.9
With Degree	10.6	9.9	0.8	2.6
TOTAL	100.0	100.0	100.0	100.0

SOURCES: Statistics Canada, 1981 Census of Canada

NOTES: * population of 15+ years

Unemployment among the Yukon's Indian population has been an issue of major concern. Census statistics indicate that in 1981 the unemployment rate among Indians was 21.3 per cent, while for non-natives the rate was only 5.8 per cent. Nationally, the unemployment rate among natives was 15.9 per cent and the rate among non-natives was 7.2 per cent. If those who were actually unemployed but were no longer counted in the labour force were included ("disguised" unemployment), the rate of Indian unemployment would have been much higher.

The combination of a skewed age distribution, low participation rate and high unemployment resulted in an employment-population ratio among Indians of only 45 per cent in 1981, while among non-natives the ratio was 80 per cent.

Many Yukon Indians who are employed within the wage economy are employed in government or government-related positions. In 1981, 50 per cent of all employed Indians were employed within this sector. This compares to a figure for non-natives of 26 per cent. Especially important amongst working Indians in 1981 was employment with bands. This employment group alone constituted 21 per cent of all Indian employment in the Yukon in that year.

Although no recent statistics are available on Indian incomes, 1981 Census data reveal a major discrepancy between Indian and non-native incomes which probably held throughout 1981-85. According to this data source, current incomes for non-natives in the Yukon averaged $16,665 per year in 1981. The average income for Indians at the same time was $8,864 per year or about 53.2 per cent of the non-native figure.

A partial explanation for income differences can be found in differing educational backgrounds. In 1981, 53.5 per cent of non-natives in the Yukon had at least some post-secondary schooling. Among Yukon Indians the figure was only 25.4 per cent. Fully 35.2 per cent of Indians had

less than Grade 9 compared to a mere 7.7 per cent among non-natives.

In comparison to national percentages for natives, Yukon Indians show a greater proportion with post-secondary, non-university schooling, but fewer with completed university degrees. This likely reflects local post-secondary opportunities. The non-native population in the Yukon exhibits a higher proportion with post-secondary schooling than is the case nationally. This is consistent with other indicators of mobility, age and income.

The Census statistics show that Indian participation in the wage economy is limited and that those Indians earning wages are disproportionately employed by government and by bands, in particular. Perhaps the situation in 1981 (which is thought to hold more recently as well) is best encapsulated in the share of all income earned in 1980 in the Yukon by Indians. Of approximately $239 million in total income earnings, it is estimated only $18.9 million or 7.9 per cent was earned by Yukon Indians.

If statistics point to limited Indian participation in the Yukon's wage or market economy, evidence of the extent of traditional Indian economic pursuits indicates its great importance both as a supplement to wage earnings and as an economic base in itself.

Indian subsistence activities are best understood within the broader context of the Indian traditional or village economy. Economic relations in the Indian village economy differ from those found in conventional export-based communities in several key areas. In the conventional export-based community, the income earned from exports provides for the purchasing of import goods not produced locally and for the development of local consumer services. In the Indian village economy income earned from commercial activities, such as trapping, together with wage earnings, is used not only to purchase consumer import needs but also to purchase supplies required for subsistence harvesting. Thus, rather than importing certain food stuffs and other

goods which would require high export-based incomes to allow their purchase, the Indian economy generates these goods locally.

Traditional activities are retained by Indian people for many reasons other than the lower cost advantage of providing food supplies from traditional sources. Factors such as communal sharing, food supply security, social cohesion and the passing on of traditional ways represent only some of the non-financial reasons for retaining traditional harvesting. The major harvesting activities pursued by Indian people in the Yukon are hunting, trapping and fishing. Berries, roots, eggs and firewood are also collected for domestic purposes.

When the subsistence harvest is viewed as income or income-in-kind, the distribution of this "income" becomes important. In a recent study of Teslin, it was found that portions of the country food harvest were distributed from those most successful at harvesting to those most in need. In this way, the distribution of the harvest "income" tends to diminish the disparity in incomes found in Indian villages, as well as add to the total value of community income.

Although no comprehensive statistics on Indian harvesting are available, except perhaps for fishing, three recent studies provide valuable data at the village level. The three villages studied were Ross River, Teslin and Old Crow, representing approximately 20 per cent of the Indian population outside of Whitehorse. Table 6 summarizes both harvest survey data and selected economic data on the three communities.

The harvest figures hint at the variation in species harvested by the three communities. In Old Crow, for example, big game represents a greater proportion of the country food diet than in either of the other two communities. This is due to the heavy dependence on caribou. On the other hand, fish are of much greater importance in both Ross River and Teslin, while small game and birds play a larger

TABLE 6

HARVEST AND ECONOMIC DATA FOR THREE YUKON INDIAN COMMUNITIES

	ROSS RIVER		OLD CROW		TESLIN	
YEAR OF STUDY	1982		1983		1984	
INDIAN POPULATION	243		220		187	
HARVEST SURVEY DATA* (kg with percent in brackets)						
Big Game	40,256	(64.3)	37,078	(90.5)	7,677	(57.9)
Small Game and Birds	7,271	(11.5)	2,025	(4.9)	299	(2.3)
Fish	15,190	(24.2)	1,865	(4.6)	5,291	(39.8)
Total	62,987	(100.0)	40,986	(100.0)	13,267	(100.0)
Adjusted Total**	69,587		55,663		17,553	
ECONOMIC DATA ($ with percent in brackets)						
Harvest Value	457,668	(36.0)	544,412	(39.3)	82,528	(14.6)
Fur Sales	211,786	(16.6)	97,808	(7.1)	26,642	(4.8)
Wages	602,879	(47.4)	744,332	(53.6)	454,363	(80.6)
Subtotal	1,272,333	(100.0)	1,386,552	(100.0)	563,533	(100.0)
Handicrafts	10,866		9,608		n.a.	
Transfer Payments***	236,136		249,470		n.a.	
Total	1,519,335		1,645,630		n.a.	

SOURCES: Dimitrov, Peter, et al., "So that the Future Will be Ours", Ross River, 1984; Deurden, Frank, "Teslin: The Indian Village and Community Economy - An Appraisal", Ryerson Polytechnical Institute, 1986; Murphy, Sheilagh, "Valuing Traditional Activities in the Northern Native Economy: The Case of Old Crow" (unpublished Master's thesis), The University of British Columbia, 1986

NOTES: * refers to edible weight harvested
** adjusted from survey sample to entire population
*** does not include all transfer payments

role in the Ross River diet than in the other two communities. This diversity in species harvested reflects both local availability and preference. Such diversity is likely to be found in other Yukon Indian communities as well.

Although comprehensive study of non-market activities has only taken place in three sample Yukon Indian communities, it is possible to extrapolate these findings to the wider, total Indian population of the Yukon. In doing so, it is also desirable to include firewood collection along with the country food harvest. It should be recognized that such estimates are necessarily approximate at best.

An assessment of Indian subsistence activities throughout the Yukon was provided in the Teslin study. In that study, it was speculated that the subsistence economy remained strong in four communities and moderately strong in an additional five communities. In several of the remaining Indian communities in the Yukon, particularly the Indian community within Whitehorse, the subsistence economy, although still significant, is substantially weaker.

On the basis of the above assessment a number of assumptions were made in extrapolating harvest quantities and values. Based on these assumptions, the value of the country food harvest in 1985 dollars would be approximately $6.57 million. To this can be added a rough value for firewood collected. Using an estimate of 5,000 cords of fuelwood gathered by Indians and an average value of $150 per cord, the value of domestically collected fuelwood in 1985 would have been $750,000. Together with the estimated value of the country food harvest, the total calculated here for these non-market traditional activities is $7.32 million or about $1,830 per capita, based on an Indian population of 4,000 (this is the Census figure for status and non-status Indians and is significantly lower than the figure for land claims coverage). It is interesting to note that the estimated value of the traditional Indian economy is about 39 per cent of the estimated value of $18.9 million for Indian wage earnings in 1981.

A comparison of the estimated annual value of non-native subsistence to the value for Indians ($1.84 million versus $7.32 million) indicates a significant difference, one which is even more pronounced if per capita annual values are used ($91 versus $1,830).

Recommendations

This report was intended primarily as an analysis of available statistical data on the structure and recent performance of the Yukon economy. From many of the observations contained in the report arise recommendations for new ways of viewing the economy, features of the economy requiring particular attention on the part of policy-makers, needed improvements in the economic data base and areas for further study. Below is a listing of those recommendations deemed to be of greatest interest to policy-makers (action on some issues has taken place since writing of this report).

1. The Yukon is much less reliant on hinterland activities within the primary and processing industries than other remote regions in Canada. The discrepancy is so wide, in fact, that the Yukon economy should be characterized as a service-based economy supplemented by resource industries rather than the reverse. The comparative weakness of the goods sector is due to the relative absence of resource processing and was evident even before the hard rock mining collapse of 1981-82. More comparative analysis should be undertaken in order to increase understanding of the uniqueness of the Yukon economy. This would provide policy-makers with the information required to address unique opportunities and problems.

2. It has often been argued that the Yukon economy is characterized by a pervasive small business sector. Statistical evidence bears this out in comparing the Yukon to national figures where a small

business is defined as having less than 20 employees. However, when the focus is very small business, those having from one to five employees, the Yukon shows a significantly lower proportion of businesses than is found nationally. Other data indicate that small business and professional income represents a smaller proportion of total personal income in the Yukon than at the national level. It is recommended that more research be undertaken into the nature of small business in the Yukon. This would aid in designing programs intended to support this key sector.

3. Yukon businesses with outside ownership tend to be large, subsidiaries of major corporations and concentrated within the export-linked sector. Since outside ownership leads to higher leakages, growth arising from increased activity within the Yukon's export sector is dampened in comparison to a situation of local ownership in this sector. However, reduced activity in the export-linked sector results in fewer impacts than if this sector were predominantly locally-owned. Additionally, subsidiaries of large corporations during unprofitable times can continue operations and provide tax write-offs to parent companies when local firms would shut down. In order to better understand the extent of outside ownership of Yukon businesses and its role within the Yukon economy it is recommended that more study be undertaken of this subject.

4. Business linkages within the Yukon (buying and selling locally) appear to be on par with much larger jurisdictions such as Saskatchewan and Alaska (one estimate suggests they may even be more developed in the Yukon). However, high levels of linkage among businesses serve to both enhance growth and increase the vulnerability of an economy to fluctuations in overall economic activity. This latter situation occurs because a disturbance within one industry will extend itself more widely through other

industries than if linkages were fewer. As with outside ownership, more research is needed into the extent of linkages and their impact on growth. This will particularly aid in developing import substitution strategies for the Yukon.

5. More research should be undertaken into the boom-bust phenomenon in the Yukon. Most data suggest that it has weakened in recent experience, yet little is known about why this may be so. Although patterns of business ownership and industry linkage are important in Yukon business cycles, as noted above, other factors such as the timing of government expenditures are important as well. The trade-offs between unrestrained growth and recession, as reflected in the boom-bust phenomenon, and alternatives which provide lower magnitude but more stable growth, should be specifically investigated.

6. The Yukon economy is characterized by numerous institutional obstacles which have hampered viable economic development. The long list of obstacles suggests the Yukon is uniquely burdened with this problem. Included here are:

   - Land issues, such as stalled Indian land claims and federal-territorial land transfers;
   - A lack of inspection facilities and safety and other standards, which has inhibited development of a food products industry and other manufacturing;
   - Restrictive financing practices on the part of banking institutions;
   - Regulatory issues, such as limited duration timber permits, uncertainty over placer effluent restrictions and unfair salmon escapement on the Yukon River.

   It is recommended that institutional obstacles to development, where these do not serve a constructive purpose, be identified and addressed. This approach to enhancing economic development could

be significantly more cost-effective than many current subsidy programs.

7. Conflicts exist in the Yukon between commercial resource use and non-market uses (subsistence and recreation, for example) and between potential commercial uses. Decision-making governing the allocation of resources would benefit from greater use of benefit-cost and other economic tools within a broad decision-making framework. At present, there is little analysis of the economic trade-offs which arise when one resource use is favoured over another. Consequently, efficient management of these resources is hampered.

8. Tax incentives have not been used in the Yukon to stimulate economic activity, in part because of the Yukon Government's inability to offset revenue losses with revenues generated by the new economic activity created by these incentives. This is the result of provisions in the federal-territorial formula financing agreement. Yet tax incentive programs have been popular and highly successful in other jurisdictions (take for example the Quebec Stock Savings Plan which is credited with raising the share of Quebec residents holding stocks from 2 per cent to 15 per cent). In the Yukon, tax incentives could be a useful complement to other economic development programs such as the EDA. It is recommended that use of the Yukon's tax system for economic development purposes be investigated and that constraints to its use, in the form of formula financing provisions, be considered during renegotiation of the formula financing agreement.

9. The role women play within the Yukon economy is unique. Yukon women demonstrate one of the highest female participation rates in the workforce in the country. Yet most of the employment generated has been within the $20,000 - $40,000 income range. Yukon women have not been any more successful at garnering higher paying (greater than $40,000 per year), upper management positions

than women elsewhere in the country. As well, the Yukon exhibits one of the highest fertility rates in Canada. This, combined with high workforce participation, suggests that support for working women in the form of daycare and other social services is uniquely important in the Yukon. It is recommended that female involvement in the economy be targeted as a key economic policy issue.

10. Statistics provided in this report indicate that Indian participation in the Yukon's wage economy is far below representation expected on the basis of population. This situation is characterized by a lower proportion of the Indian population being of labour force age, a low participation rate in the labour force, high unemployment and much lower average earnings than non-natives. It is recommended that more effort be focused on promoting Indian participation in the wage economy. Attention should be particularly focused on improving educational attainment among native people. Involvement in the wage economy, coupled with maintenance of traditional non-wage pursuits, has been expressed as an important aspiration of the Yukon's Indian community.

11. Rural communities in the Yukon show a distinct skewedness towards lower incomes, while price indices indicate higher living costs in these communities of as much as 50 per cent over Whitehorse costs. Although rural residents are able to supplement their incomes with subsistence harvests, living standards are significantly lower in these communities in comparison to Whitehorse. It is recommended that more study be undertaken of economic circumstances (community economic base studies, for example) and opportunities in rural Yukon communities. Renewable resource industries, although of limited importance Yukon-wide, provide specific opportunities to rural residents and should be a primary target of research.

12. The relative absence of resource processing or other forms of manufacturing is a distinguishing feature of the Yukon economy. Yet those manufacturing establishments present provide a relatively high employment impact due to high labour intensity and modest wages, in comparison to national averages. As well, the Yukon is designated as a special region for manufacturing investment tax credit purposes, which means the tax credit available to investors in manufacturing is 40 per cent. It is recommended that investment in manufacturing be encouraged, particularly in meat and dairy products, brewing, forest and fish products and light manufacturing of furniture and handicrafts.

13. Tourism is often noted as an industry with long-term growth potential. However, the conclusions about recent growth in tourism are based on increases in the number of border crossings. These statistics may be misleading since apparent growth in visitation may have partially resulted from changes in travel patterns. For example, more tourists (and Yukon residients) may be taking side trips to Skagway rather than actually beginning a trip from that entry point. It is important for marketing purposes and for determining appropriate levels of industry support that independent estimates of non-resident visitation and expenditures be made.

14. The number of accommodation units in the Yukon available to tourists increased by only 4 per cent from 1981 to 1985. During this period there was an apparent shift towards greater camping-based travel as growth in the number of travellers apparently far exceeded the increase in accommodation units. This trend is worth investigating since camping-based travel involves much lower expenditures per traveller and, consequently, provides fewer economic benefits to the Yukon. It is recommended that the causes for a shift in travel patterns be researched in order to determine whether it is due to scarce accommodation. If this is the cause, new accommodation facilities should be encouraged.

15. The value of production from hard-rock mines is significantly overstated by Statistics Canada figures. These figures represent the value of metal contained in concentrates shipped from the territory. The returns to lead-zinc producers, for example, may be as low as 40 to 50 per cent of this value once smelting and transportation charges are subtracted. On the other hand, data on the value of placer production remains poor and is widely recognized as understating the true level of production. This situation should be addressed since it may lead to an improper balance in industry support programs where support is based on relative values of production.

16. Harvesting of the Yukon's renewable resources is unusual in that the estimated value of subsistence use exceeds the value of the commercial harvest and its products by as much as 50 per cent. The important role played by the subsistence harvest in providing not only sustenance but an alternative economic base in rural communities has not always been recognized (this is partially evident in the declining non-native harvest of edible species). It is recommended that the subsistence harvest be promoted and supported in rural economies as a component in economic development planning. These communities have a "comparative advantage" in supplying portions of their dietary needs locally. Developments which jeopardize this source of "income", only to replace it with monetary income which must then be used to purchase foodstuffs, should be carefully scrutinized.

17. Legal, definitional and regulatory issues surrounding the subsistence harvest, such as the sale of wild meat and the allocating of harvests among commercial, recreational and subsistence users, have not been widely addressed in the Yukon or elsewhere in Canada. Attempts to do this in Alaska have created

tremendous conflicts between users and regulators and amongst users themselves. With conflicts developing already over subsistence use of some Yukon renewable resources, it is recommended that these issues be addressed and that the Alaska situation be studied and avoided.

18. In assessing the role of subsistence activity, it is also recommended that its calculated value (net of harvest costs) be considered as a component in personal income rather than as the value of output from a distinct sector. This depicts more accurately the income-in-kind nature of these activities.

19. Fuelwood use in the Yukon grew enormously during the 1981-85 period. Despite the important role played by this energy source, little study has been undertaken into demand and supply conditions such as the apparent shift in supply from domestic gathering to commercial woodcutting. The long-term health of the fuelwood market, which requires investigation of long-term supply costs and the price outlook for heating fuel, is in particular need of study.

20. This study has focused on analysis of Yukon economic data. Although data availability in many respects is very good in comparison to other Canadian regions with a population of 25,000, new economic statistics could be developed while some existing statistical series may be misinterpreted in their present form. Below is a list of observations and recommendations for improving the Yukon's economic data base.

    - Data on the participation of the Yukon's Indian population in the wage economy is confined to outdated and questionable Census data; new sources of data should be devised.
    - Employment data by industry, consistent with time series used elsewhere (based on the Standard Industrial Classification Code) was not available for the Yukon. It is imperative that this data base be established to allow inter-jurisdictional comparisons.

- Unemployment rate estimates should be available for Yukon communities and the Yukon's Indian population.
- Agricultural data is extremely poor for the Yukon. More effort should be devoted to establishing the extent of improved land, crop and livestock statistics, and the value of agricultural output.
- Forestry permit statistics are not reliable measures of forest industry activity. Permit data is not only incomplete but only approximates actual harvests before they take place. Firm price data derived from local markets is also needed.
- Fishery statistics, including catch and processing data, should be compiled and made more available. At present, those statistics collected are contained in internal government reports or must be obtained directly from processors. As a result, fishery data is not generally available.
- Annual estimates for the value of exploration activity taking place or based in the Yukon originate from several sources and differ for any specific year. Discrepancies should be identified and effort devoted to compiling a single expenditure figure for each year.
- Statistics Canada data on Yukon manufacturing is based on a very small sample of establishments. With the sample in some years comprised of as few as five establishments, the data generated is of limited representativeness. Although Statistics Canada faces problems tracking small resource processors, they should be requested to develop better manufacturing statistics for the Yukon.
- Estimates of the value of food imported to the Yukon ($45 million annually is often quoted) are erroneously based on retail food store receipts. Statistics Canada retail receipts for food stores include sales of other household items sold in grocery stores and substantially over-estimate food sales alone.

- Yukon financial data compiled by both the Bank of Canada and Statistics Canada is inadequate. Statistics should be available for the value of financial transactions in the Yukon and specifically for business loans, personal deposits and residential mortgages.
- Estimates made in this study of the value of subsistence activity should be considered to be approximations. Further study and estimation is necessary to establish a more accurate value, particularly for the Yukon's Indian people.